



Complete Summary

TITLE

Osteoporosis: percentage of patients aged 50 years and older with a diagnosis of osteoporosis who were prescribed pharmacologic therapy within 12 months.

SOURCE(S)

American Academy of Family Physicians, American Academy of Orthopaedic Surgeons, American Association of Clinical Endocrinologists, American College of Rheumatology, Endocrine Society, Physician Consortium for Performance Improvement®, National Committee for Quality Assurance. Osteoporosis physician performance measurement set. Chicago (IL): American Medical Association, National Committee for Quality Assurance; 2006 Oct. 15 p. [7 references]

Measure Domain

PRIMARY MEASURE DOMAIN

Process

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the [Measure Validity](#) page.

SECONDARY MEASURE DOMAIN

Does not apply to this measure

Brief Abstract

DESCRIPTION

This measure is used to assess the percentage of patients aged 50 years and older with a diagnosis of osteoporosis who were prescribed pharmacologic therapy within 12 months.

RATIONALE

Pharmacologic therapy is an evidence-based recommendation for the treatment of osteoporosis.*

*The following clinical recommendation statements are quoted verbatim from the referenced clinical guidelines and support the rationale:

Agents approved by the Food and Drug Administration (FDA) for osteoporosis prevention and/or treatment include (in alphabetical order) bisphosphonates (alendronate, ibandronate, risedronate), salmon calcitonin, estrogen, raloxifene, and teriparatide. All act by reducing bone resorption, except for teriparatide, which has anabolic effects on bone. Although estrogen is not approved for treatment of osteoporosis, there is level 1 evidence for its efficacy in reducing vertebral fractures, nonvertebral fractures, and hip fractures. Level 1 evidence of efficacy in reducing the risk of vertebral fractures is available for all the agents approved for treatment of osteoporosis (bisphosphonates, calcitonin, raloxifene, and teriparatide). Prospective trials have demonstrated the effectiveness of bisphosphonates and teriparatide in reducing the risk of nonvertebral fractures (level 1), but only some of the bisphosphonates have been shown to reduce the risk of hip fractures in prospective controlled trials (level 1). (American Association of Clinical Endocrinologists [AACE])

US FDA approved pharmacologic options for osteoporosis prevention and/or treatment of postmenopausal osteoporosis include, in alphabetical order: bisphosphonates (alendronate, alendronate plus D, ibandronate, and risedronate, risedronate with 500 mg of calcium as the carbonate), calcitonin, estrogens (estrogens and/or hormone therapy), parathyroid hormone [PTH (1-34), teriparatide], and selective estrogen receptor modulators or SERMs (raloxifene). (National Osteoporosis Foundation [NOF])

PRIMARY CLINICAL COMPONENT

Osteoporosis; pharmacologic therapy (bisphosphonates [alendronate, ibandronate, and risedronate], calcitonin, estrogens [estrogens and/or hormone therapy], parathyroid hormone [PTH (1-34), teriparatide], and selective estrogen receptor modules or SERMs [raloxifene])

DENOMINATOR DESCRIPTION

All patients aged 50 years and older with the diagnosis of osteoporosis (see the related "Denominator Inclusions/Exclusions" field in the Complete Summary)

NUMERATOR DESCRIPTION

Patients who were prescribed pharmacologic therapy within 12 months (see the related "Numerator Inclusions/Exclusions" field in the Complete Summary)

Evidence Supporting the Measure

EVIDENCE SUPPORTING THE CRITERION OF QUALITY

- A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence

NATIONAL GUIDELINE CLEARINGHOUSE LINK

- [Physician's guide to prevention and treatment of osteoporosis.](#)
- [American Association of Clinical Endocrinologists medical guidelines for clinical practice for the prevention and treatment of postmenopausal osteoporosis: 2001 edition, with selected updates for 2003.](#)

Evidence Supporting Need for the Measure

NEED FOR THE MEASURE

Use of this measure to improve performance
Variation in quality for the performance measured

EVIDENCE SUPPORTING NEED FOR THE MEASURE

Feldstein A, Elmer PJ, Orwoll E, Herson M, Hillier T. Bone mineral density measurement and treatment for osteoporosis in older individuals with fractures: a gap in evidence-based practice guideline implementation. Arch Intern Med 2003 Oct 13;163(18):2165-72. [46 references] [PubMed](#)

Mudano AS, Casebeer L, Patino F, Allison JJ, Weissman NW, Kiefe CI, Person S, Gilbert D, Saag KG. Racial disparities in osteoporosis prevention in a managed care population. South Med J 2003 May;96(5):445-51. [PubMed](#)

U.S. Department of Health and Human Services. Bone health and osteoporosis: a report of the Surgeon General. Rockville (MD): U.S. Department of Health and Human Services, Office of the Surgeon General; 2004.

State of Use of the Measure

STATE OF USE

Current routine use

CURRENT USE

Internal quality improvement
National reporting

Application of Measure in its Current Use

CARE SETTING

Ambulatory Care
Physician Group Practices/Clinics

PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Physicians

LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Individual Clinicians

TARGET POPULATION AGE

Age greater than or equal to 50 years

TARGET POPULATION GENDER

Either male or female

STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

Characteristics of the Primary Clinical Component

INCIDENCE/PREVALENCE

Unspecified

ASSOCIATION WITH VULNERABLE POPULATIONS

Unspecified

BURDEN OF ILLNESS

Unspecified

UTILIZATION

Unspecified

COSTS

Unspecified

Institute of Medicine National Healthcare Quality Report Categories

IOM CARE NEED

Living with Illness
Staying Healthy

IOM DOMAIN

Effectiveness

Data Collection for the Measure

CASE FINDING

Users of care only

DESCRIPTION OF CASE FINDING

All patients aged 50 years and older with the diagnosis of osteoporosis

DENOMINATOR SAMPLING FRAME

Patients associated with provider

DENOMINATOR INCLUSIONS/EXCLUSIONS

Inclusions

All patients aged 50 years and older with the diagnosis of osteoporosis

Exclusions

- Documentation of medical reason(s) for not prescribing pharmacologic therapy
- Documentation of patient reason(s) for not prescribing pharmacologic therapy
- Documentation of system reason(s) for not prescribing pharmacologic therapy

RELATIONSHIP OF DENOMINATOR TO NUMERATOR

All cases in the denominator are equally eligible to appear in the numerator

DENOMINATOR (INDEX) EVENT

Clinical Condition

DENOMINATOR TIME WINDOW

Time window is a single point in time

NUMERATOR INCLUSIONS/EXCLUSIONS

Inclusions

Patients who were prescribed pharmacologic therapy* within 12 months

***Note:** U.S. Food and Drug Administration approved pharmacologic options for osteoporosis prevention and/or treatment of postmenopausal osteoporosis include, in alphabetical order: bisphosphonates (alendronate, ibandronate, and risedronate), calcitonin, estrogens (estrogens and/or hormone therapy), parathyroid hormone [PTH (1-34), teriparatide], and selective estrogen receptor modulators or SERMs (raloxifene).

Exclusions

None

MEASURE RESULTS UNDER CONTROL OF HEALTH CARE PROFESSIONALS, ORGANIZATIONS AND/OR POLICYMAKERS

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

NUMERATOR TIME WINDOW

Fixed time period

DATA SOURCE

Administrative data
Medical record

LEVEL OF DETERMINATION OF QUALITY

Individual Case

PRE-EXISTING INSTRUMENT USED

Unspecified

Computation of the Measure

SCORING

Rate

INTERPRETATION OF SCORE

Better quality is associated with a higher score

ALLOWANCE FOR PATIENT FACTORS

Unspecified

STANDARD OF COMPARISON

Internal time comparison

Evaluation of Measure Properties

EXTENT OF MEASURE TESTING

Unspecified

Identifying Information

ORIGINAL TITLE

Measure #4: pharmacologic therapy.

MEASURE COLLECTION

[The Physician Consortium for Performance Improvement® Measurement Sets](#)

MEASURE SET NAME

[Osteoporosis Physician Performance Measurement Set](#)

SUBMITTER

American Medical Association on behalf of the AAFP, AAOS, AACE, American College of Rheumatology, The Endocrine Society, Physician Consortium for Performance Improvement®, and the National Committee for Quality Assurance

DEVELOPER

American Academy of Family Physicians
American Academy of Orthopaedic Surgeons
American Association of Clinical Endocrinologists
American College of Rheumatology
National Committee for Quality Assurance
Physician Consortium for Performance Improvement®
The Endocrine Society

FUNDING SOURCE(S)

Unspecified

COMPOSITION OF THE GROUP THAT DEVELOPED THE MEASURE

Steven Petak, MD, JD, FACE (*Co-Chair*); Kenneth Saag, MD, MSc (*Co-Chair*); Robert Adler, MD; H. Chris Alexander, III, MD, FACP; Donald Bachman, MD, FACP; Joel Brill, MD; Jan Busby-Whitehead, MD; Thomas Dent, MD; Nancy Dolan, MD; Leonie Gordon, MB, ChB; Tomas Griebling, MD; Richard Hellman, MD, FACP, FACE; Marc C. Hochberg, MD, MPH; C. Conrad Johnston, Jr., MD; Joseph Lane, MD; Leon Lenchik, MD; Bonnie McCafferty, MD, MSPH; Michael Maricic, MD; Michael L. O'Dell, MD, MSHA, FAFAP; Sam J.W. Romeo, MD, MBA; Frank Salvi, MD, MS; Joseph Shaker, MD; Madhavi Vemireddy, MD; David Wong, MD, MSc, FRS(C)

Bruce Bagley, MD, American Academy of Family Physicians; Janet Leiker, RN, MPH, CPHQ, American Academy of Family Physicians

Bob Haralson, MD, MBA, American Academy of Orthopaedic Surgeons; Jill Hughes, American Academy of Orthopaedic Surgeons

Tammy L. Chaney, American Association of Clinical Endocrinologists

Amy Miller, American College of Rheumatology

Janet Kreizman, The Endocrine Society

Rebecca A. Kresowik, Facilitators; Timothy F. Kresowik, MD, Facilitator

Heidi Bossley, MSN, MBA, American Medical Association; Karen S. Kmetik, PhD, American Medical Association

Roberta Biegel, National Osteoporosis Foundation

Sarah Sampsel, MPH, National Committee for Quality Assurance

Ann Watts, RN, Joint Commission on Accreditation of Healthcare Organizations

FINANCIAL DISCLOSURES/OTHER POTENTIAL CONFLICTS OF INTEREST

Conflicts, if any, are disclosed in accordance with the Physician Consortium for Performance Improvement® conflict of interest policy.

ENDORSER

National Quality Forum

INCLUDED IN

Ambulatory Care Quality Alliance
Physician Quality Reporting Initiative

ADAPTATION

Measure was not adapted from another source.

RELEASE DATE

2006 Oct

MEASURE STATUS

This is the current release of the measure.

SOURCE(S)

American Academy of Family Physicians, American Academy of Orthopaedic Surgeons, American Association of Clinical Endocrinologists, American College of Rheumatology, Endocrine Society, Physician Consortium for Performance Improvement®, National Committee for Quality Assurance. Osteoporosis physician performance measurement set. Chicago (IL): American Medical Association, National Committee for Quality Assurance; 2006 Oct. 15 p. [7 references]

MEASURE AVAILABILITY

The individual measure, "Measure #4: Pharmacologic Therapy," is published in the "Osteoporosis Physician Performance Measurement Set." This document and technical specifications are available in Portable Document Format (PDF) from the

American Medical Association (AMA)-convened Physician Consortium for Performance Improvement® Web site: www.physicianconsortium.org.

For further information, please contact AMA staff by e-mail at cqi@ama-assn.org.

NQMC STATUS

This NQMC summary was completed by ECRI Institute on October 12, 2007. The information was verified by the measure developer on November 21, 2007.

COPYRIGHT STATEMENT

© Measures including specifications

© 2005-6 American Medical Association and National Committee for Quality Assurance

Disclaimer

NQMC DISCLAIMER

The National Quality Measures Clearinghouse™ (NQMC) does not develop, produce, approve, or endorse the measures represented on this site.

All measures summarized by NQMC and hosted on our site are produced under the auspices of medical specialty societies, relevant professional associations, public and private organizations, other government agencies, health care organizations or plans, individuals, and similar entities.

Measures represented on the NQMC Web site are submitted by measure developers, and are screened solely to determine that they meet the NQMC Inclusion Criteria which may be found at <http://www.qualitymeasures.ahrq.gov/about/inclusion.aspx>.

NQMC, AHRQ, and its contractor ECRI Institute make no warranties concerning the content or its reliability and/or validity of the quality measures and related materials represented on this site. The inclusion or hosting of measures in NQMC may not be used for advertising or commercial endorsement purposes.

Readers with questions regarding measure content are directed to contact the measure developer.

© 2008 National Quality Measures Clearinghouse

Date Modified: 11/3/2008

